

Notice of Allowability

Application No.

10/006,999

Examiner

Yubin Hung

Applicant(s)

FABER ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/20/06.
2. ☒ The allowed claim(s) is/are 2-5,7-10,12-18 and 39-41.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JINGGE WU
PRIMARY EXAMINER

Response to Amendment/Arguments

1. This action is in response to the amendment filed on Nov. 20, 2006, which has been entered.
2. In view of Applicant's amendment, the 35 USC § 112 rejections of claims 2-5, 7-10, 40 and 41 have been withdrawn.
3. Applicant's amendment has rendered moot the 35 USC § 102 and 103 rejections of claims 2-5, 7-10, 40 and 41.

Allowable Subject Matter

4. Claims 2-5, 7-10, 12-18 and 39-41 are allowed. [Note: Claim 39 recites "combination of unmodified values" in lines 17, 23 and 26, each corresponding to one of three passes of data processing (recited in lines 16-19, 20-25 and 26-28, respectively). It is clear that "unmodified" in each pass is with respect to the processed data from its preceding pass and is examined and allowed on this basis. **Note further that this interpretation was indicated in the Office actions mailed 01/13/2006 and 07/20/06 and has not been traversed by Applicant.**]

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5. The following is an examiner's statement of reasons for allowance:

A. Regarding claim 39, closest art of record Gormish discloses the limitations recited in the first three paragraphs of the claim (per the analysis of claim 1).

Additionally, Li et al. ("On implementing Transforms from integers to integers," Proc. ICIP, Vol. III, 4-7 Oct. 1998, pp. 881-885) discloses reversible integer-to-integer transform (for a given linear transform). However, neither teaches nor suggests modifying at least one data value using the three passes as recited in the claim.

B. Regarding claim 40, while closest art of record Gormish et al. ("Lossless and nearly lossless compression for high quality images," Proceedings of the SPIE, Vol. 3025, March 1997, pp. 62-70) discloses most of its limitations (per the analysis in the rejection of claim 40 in the office action mailed 07/20/06), it does not disclose, teach or suggest that the linear transform in question is a 2×2 diagonal matrix with a determinant of 1, is factored in one of the recited manners or that a corresponding error bound is minimized.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion and Contact Information

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Hallapuro et al. (US 7,082,450) – discloses a method that simplifies a DTC transform by diagonal factorization and approximating irrational matrix entries with rational numbers [columns 9 & 10]

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (571) 272-7451. The examiner can normally be reached on 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JINGGEWU
PRIMARY EXAMINER

Yubin Hung
Patent Examiner
Art Unit 2624
December 18, 2006